

Notice of Allowability

Application No.

10/616,269

Examiner

Mujtaba K. Chaudry

Applicant(s)

SHARMA ET AL.

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2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/2/2006.
2. ☒ The allowed claim(s) is/are 1-5, 7, 8, 10-14 and 16-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

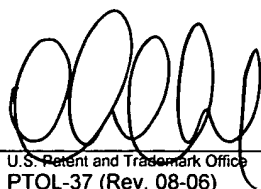
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

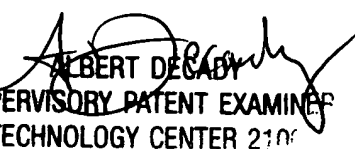
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/3/2006.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


U.S. Patent and Trademark Office
PTOL-37 (Rev. 08-06)

11/6/06


ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael L. Gencarella on November 2, 2006.

Please amend the application as follows:

Please replace claim 1 with:

1. A method for reliably transmitting data between microprocessors, comprising:
 - selecting a data packet stored in memory associated with a first microprocessor to be transmitted from the first microprocessor to a second microprocessor;
 - establishing a pointer region configured to indicate an address of the data packet in the memory, the pointer region being separate from the memory;
 - appending a first value derived from a data portion of the data packet to the data packet;
 - transmitting the data packet to said second microprocessor;

comparing the first value to a second value derived from the data packet received by the second microprocessor;

if the second value is different than the first value then the method includes, transmitting a signal to the pointer region for retransmission of the data packet; and

retransmitting the data packet from the memory;

wherein the pointer region includes a plurality of retry pointers, each of the plurality of retry pointers being 11 bit pointers.

Please cancel claim 6.

Please replace claim 7 with:

7. A microchip configured to reliably transmit data comprising:

a memory region for storing data;

a selection module configured to select a portion of the data from the memory region for transmission;

an error-checking module configured to calculate a value derived from the selected portion of the data prior to transmission of the selected portion;

a pointer region including a plurality of object pointers, one of the plurality of object pointers associated with an address of the portion of the data, wherein the one of the plurality of object pointers is configured to receive a signal indicating an error associated with the transmission of the selected portion of the data, the pointer region being separate from the memory;

a scheduler module in communication with each of the plurality of object pointers, wherein the scheduler module is configured to schedule retransmission of the selected portion of the data from the memory in response to the signal indicating the error being received by the one of the plurality of object pointers;

wherein the signal is a retry signal and the one of the object pointers is an 11-bit retry pointer.

Please cancel claim 9.

Please replace claim 14 with:

14. A system providing reliable link data flow between microchips, comprising:

a first microchip including a memory capable of storing a data packet, the first microchip further including,

a pointer associated with a memory address of the data packet, the pointer being associated with a pointer region separate from the memory;

wherein the pointer is an 11-bit pointer;

a selection logic module in communication with the memory, the selection logic module configured to select the data packet for transmission from the memory; and

an error-checking module configured to calculate a first value derived from the data packet prior to transmission of the data packet from the first microchip;

a serial link; and

a second microchip in communication with the first microchip through the serial link, the second microchip including an error verifying module configured to calculate a second value derived from the data packet received from the first microchip, the error verifying module further configured to compare the second value to the first value, wherein if the first value and the second value are different the error verifying module transmits a signal to the pointer region causing the data packet to be retransmitted to the second microchip from the memory of the first microchip.

Please cancel claim 15.

REASONS FOR ALLOWANCE

Claims 1-5, 7, 8, 10-13, 14 and 16-19 are allowed. The following is an Examiner's statement of reasons for allowance:

Independent claim 1 of the present application teaches a method for reliably transmitting data between microprocessors, comprising: selecting a data packet stored in memory associated with a first microprocessor to be transmitted from the first microprocessor to a second microprocessor; establishing a pointer region configured to indicate an address of the data packet in the memory, the pointer region being separate from the memory; appending a first value derived from a data portion of the data packet to the data packet; transmitting the data packet to said second microprocessor; comparing the first value to a second value derived from the data packet received by the second microprocessor; if the second value is different than the first value then the method includes, transmitting a signal to the pointer region for retransmission of the data packet; and retransmitting the data packet from the memory; wherein the pointer region includes a plurality of retry pointers, each of the plurality of retry pointers being 11 bit pointers. The foregoing limitations are not found in the prior arts of record. Particularly, none of the prior arts of record teach nor fairly suggest, "...selecting a data packet stored in memory associated with a first microprocessor to be transmitted from the first microprocessor to the second microprocessor; *establishing a pointer region configured to indicate an address of the data packet in the memory, the pointer region being separate from the memory*; appending a first value derived from a data portion of the data packet to the data packet; transmitting the data packet to said second microprocessor; comparing the first value to a second value derived from the data packet received by the second microprocessor; if the second value is different than the

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first value then the method includes, transmitting a signal to the pointer region for retransmission of the data packet; and retransmitting the data packet from the memory; *wherein the pointer region includes a plurality of retry pointers, each of the plurality of retry pointers being 11 bit pointers.*”

Independent claims 7 and 14 include similar limitations of independent claim 1 and therefore are allowed for similar reasons.


Dependent claims 2-5, 8, 10-13 and 16-19 depend from allowable independent claims 1, 7 and 14 and inherently include limitations therein and therefore are allowed as well.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mujtaba K. Chaudry whose telephone number is 571-272-3817. The examiner can normally be reached on Mon-Thur 9-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mujtaba Chaudry
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November 6, 2006

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